

ABSTRACT

5 AN APPARATUS AND METHOD OF RADIO ACCESS MANAGEMENT FOR
A RADIO COMMUNICATION SYSTEM

The invention relates to access management in a radio communication system. A subscriber unit (101) transmits an access message to a base station (103). A 10 Radio Access Controller (RNC) (109) receives information of the access request. The RNC (109) comprises an interference characteristic processor (111) which determines an interference characteristic associated with the subscriber unit (101). The interference characteristic may include an inter-cell interference factor and an intra-cell orthogonality factor determined as a 15 function of the distance between the base station and the subscriber unit and/or based on subscriber unit measurements of pilot signals from the selected base station (103) and neighbouring base stations (105, 107). The interference characteristic processor (111) is coupled to a resource requirement processor (113) which determines a resource requirement for achieving a 20 desired signal to interference ratio for the requested service in response to the interference characteristic. The RNC (109) further comprises an access controller (115) which accepts or rejects the request in response to the determined resource requirement.

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FIG. 1